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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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JOHN W. FREEMAN, ESQ.  
Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110-2804

EXAMINER

WILKINS III, HARRY D

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 07/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MF-4

**Office Action Summary**

Application No.

09/943,987

Applicant(s)

TAYLOR, ARTHUR D.

Examiner

Harry D Wilkins, III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 1-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 6) ☐ Other:

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 2-4 and 10-12 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. These claims recite limited ranges of elements present in the parent independent claim. However, the scope of the dependent claims includes values outside the ranges of the parent claim. For example, the range of Ag in claim 1 is 2-6%, but the range of Ag in claim 2 is less than 5%, which includes values below 2%.
2. Claims 1-12 are objected to because of the following informalities: these claims do not state the basis for the percentages of the composition. Based on the disclosure of the specification at page 3, line 20, the claims will be examined based on a weight percent basis. In addition, in claims 1 and 5, the parentheses around "optional" should be deleted. Suggested language here is "optionally boron up to 0.5%". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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5. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation of 2-6% Ag and 0.1-2% Co, and the claim also recites 2-5% Ag and 0.1-1% Co which is the narrower statement of the range/limitation.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4 and 7-8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Diamond (US 5,384,089).

Diamond anticipates the claimed invention. Diamond teaches (see col 8, lines 21-34, claim 5) a gold alloy that contains 2.0-22.0 wt% Ag, 0.0-2.0 wt% Co, 2.0-47.33 wt% Cu and the balance Au. The ranges of composition disclosed by Diamond overlap the presently claimed ranges. With respect to the presence of other elements in the composition of Diamond, the present claim recites an alloy "comprising" a list of elements. "Comprising" has been given a definition to leave the composition open to the inclusion of other elements, even in major amounts. Regarding the presence of B in the presently claimed composition, because the presence of B is optional, a reference need not teach its presence in order to anticipate the claim.

Regarding claim 2, Diamond teaches 2.0-22.0 wt% Ag, which overlaps the presently claimed range.

Regarding claims 3 and 4, Diamond teaches 0.0-2.0 wt% Co, which overlaps the presently claimed range.

Regarding claims 7 and 8, Diamond teaches (see abstract) that the gold alloys are useful in the casting of jewelry articles.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5, 6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diamond (US 5,384,089) in view of "Gold and Gold Alloys".

The teachings of Diamond are discussed above in paragraph no. 7.

Diamond does not teach that a master alloy is made for combining with gold.

"Gold and Gold Alloys" teaches (see paragraph spanning pages 705 and 706) that gold alloys can be converted by the addition of standard base alloys to high-karat golds.

Therefore, it would have been obvious to one of ordinary skill in the art to have converted the alloy of Diamond for use as a master alloy (standard base alloy) to be mixed with gold to produce the final alloy because this would allow for easy conversion to different ratios of the added elements, e.g. -silver, copper, cobalt.

By backing out the composition of Diamond by removing the gold, the composition of the required master alloy would have overlapped the presently claimed composition. With respect to the presence of other elements in the composition of Diamond, the present claim recites an alloy "comprising" a list of elements. "Comprising" has been given a definition to leave the composition open to the inclusion of other elements, even in major amounts. Regarding the presence of B in the presently claimed composition, because the presence of B is optional, a reference need not teach its presence in order to anticipate the claim.

Regarding claims 6 and 9, in view of the teachings of "Gold and Gold Alloys", it would have been obvious to one of ordinary skill in the art to have combined the master alloy with gold to make a 22k gold alloy.

Regarding claims 10-12, see above regarding claims 2-4.

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry D Wilkins, III whose telephone number is 703-305-9927. The examiner can normally be reached on M-F 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V King can be reached on 703-308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Harry D Wilkins, III  
Examiner  
Art Unit 1742

ROY KING   
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

hdw  
July 18, 2002